

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) (1) An isolated polypeptide consisting of the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 4, or (2) an isolated polypeptide exhibiting a potassium-dependent sodium-calcium exchange activity and consisting of an amino acid sequence in which 1 to 5 amino acids in total are substituted, deleted, inserted, and/or added at one or plural portions in the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 4.
2. (Currently amended) The isolated polypeptide according to claim 1, which is (a) a polypeptide consisting of the amino acid sequence of SEQ ID NO: 2, or (2) a polypeptide exhibiting a potassium-dependent sodium-calcium exchange activity and consisting of an amino acid sequence in which 1 to 5 amino acids in total are substituted, deleted, inserted, and/or added at one or plural portions in the amino acid sequence of SEQ ID NO: 2.
3. (Currently amended) The isolated polypeptide according to claim 1 ~~or~~ 2, wherein the sodium-calcium exchange activity is a reverse sodium-calcium exchange activity.
4. (Currently amended) An isolated polynucleotide encoding the polypeptide according to any one of claims 1 to 3 or 18.
5. (Original) An expression vector comprising the polynucleotide according to claim 4.
6. (Original) A cell transfected with the expression vector according to claim 5.
7. (Currently amended) A method for producing the polypeptide according to any one of claims 1 to 3 or 18, ~~characterized by using the cell according to claim 6~~ the method comprising expressing a polynucleotide encoding the polypeptide in a cell transfected with an expression vector comprising the polynucleotide.

8. (Currently amended) A method for screening an inhibitor of the polypeptide according to any one of claims 1 to 3 or 18, comprising the steps of :
 - (1) bringing a cell expressing the polypeptide into contact with a substance to be tested,
 - (2) analyzing whether or not a potassium-dependent sodium-calcium exchange activity in the polypeptide is inhibited, and
 - (3) selecting a substance which inhibits the potassium-dependent sodium-calcium exchange activity in the polypeptide.
9. (Currently amended) A method for screening an inhibitor of leukocyte activation, comprising the steps of:
 - (1) bringing a cell expressing the polypeptide according to any one of claims 1 to 3 or 18 into contact with a substance to be tested,
 - (2) analyzing whether or not a potassium-dependent sodium-calcium exchange activity in the polypeptide is inhibited, and
 - (3) selecting a substance which inhibits the potassium-dependent sodium-calcium exchange activity in the polypeptide.
10. (Currently amended) A method for screening a therapeutic agent for postischemic reperfusion injury and/or an inflammatory disease, comprising the steps of:
 - (1) bringing a cell expressing the polypeptide according to any one of claims 1 to 3 or 18 into contact with a substance to be tested,
 - (2) analyzing whether or not a potassium-dependent sodium-calcium exchange activity in the polypeptide is inhibited, and
 - (3) selecting a substance which inhibits the potassium-dependent sodium-calcium exchange activity in the polypeptide.
11. (Currently amended) A process for manufacturing a pharmaceutical composition for treating postischemic reperfusion injury and/or an inflammatory disease, comprising the steps of:

- (1) bringing a cell expressing the polypeptide according to any one of claims 1 to 3 or 18 into contact with a substance to be tested,
 - (2) analyzing whether or not a potassium-dependent sodium-calcium exchange activity in the polypeptide is inhibited, and
 - (3) preparing a medicament containing the substance.
12. (Original) A pharmaceutical composition for inhibiting leukocyte activation, comprising as an active ingredient a substance obtainable by the method according to claim 8.
13. (Original) A pharmaceutical composition for treating postischemic reperfusion injury and/or an inflammatory disease, comprising as an active ingredient a substance obtainable by the method according to claim 8.
14. (Original) A method for inhibiting leukocyte activation, comprising the step of: administering to a subject a substance obtainable by the method according to claim 8.
15. (Original) A method for treating postischemic reperfusion injury and/or an inflammatory disease, comprising the step of:
administering to a subject a substance obtainable by the method according to claim 8.
16. (Canceled)
17. (Canceled)
18. (New) The polypeptide according to claim 2, wherein the sodium-calcium exchange activity is a reverse sodium-calcium exchange activity.

In the present amendment, applicants have canceled claims 16 and 17 without prejudice or disclaimer. Applicants have added new claim 18, which is supported by claim 3 as originally filed. Applicants have amended claims 4 and 7-11 to depend from new claim 18. That amendment is also supported by claim 3 as originally filed. Applicants have amended claims 1-4 to recite "isolated." Applicants have also amended claim 7 to recite, "the method comprising expressing a polynucleotide encoding the polypeptide in a cell transfected with an expression vector comprising the polynucleotide." That amendment is supported by the specification, for example, at page 20, third full paragraph, and the paragraph bridging pages 20-21. Thus, the foregoing amendments add no new matter.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

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By: *Danielle Pasqualone*
Danielle M. Pasqualone
Reg. No. 43,847
Customer No. 22,852